In this year of the Strait, decisions and actions being taken are set to change the vista south from Gibraltar, and north to Gibraltar. The traditional suburban South District, with its trees and gardens, and the rich wildlife of the internationally important Windmill Hill Flats are giving way to high density residential, amenity and industrial developments. The unco-ordinated way in which these conflicting projects are being introduced does not fail to amaze all those who aim to take stock and come to terms with what is happening in Gibraltar’s south.

And that is without even considering the drastic interruption of the natural views of a site of huge global pre-historic, historical and landscape interest and importance.

From the time, around six million years ago, that the Atlantic broke through between the African and European continental masses, and a waterfall of massive proportions cascaded south of Europa Point for thousands of years, the view from the top of the Rock – or whatever was there then – will have been incomparable. Had there been a tourist industry then, it would have been one of the top destinations on the planet. Tourists flock to the Rock now, only to be increasingly defrauded as the views they expect get scraped away with buildings such as Clifftops, the new Prison and a power station.

There is clearly a need for Gibraltar to continue to grow, and social needs such as a prison and a power station need to be fulfilled. It may be that on occasion views have to be compromised in order to achieve these, but not in every case.

Not only is wildlife protection important, but there is a need for Gibraltar to retain some areas of countryside, away from the Upper Rock, where one can escape to and be able to be in contact with nature. There are hardly any such places left.

There is a real concern that the needs of the natural environment, and the need to have quiet places with pleasing views, are not featuring enough in the evidence that decision-makers consider when about to give the final go-ahead. This is not due to a lack of lobbying, it just doesn't seem to be given the due importance.

The result will be that, while the needs will be more or less provided, much of less definable value will have gone.

When this is due to construction of much less necessary edifices such as a luxury block of flats and a private retirement home, the unfortunate becomes offensive to those who love nature. If in addition commitments entered into for mitigation or compensation are not met, dissatisfaction mounts further. In the case of the Prison, the agreed plan is to clear a large tract of alien invasive prickly pear cactus to restore habitat for Barbary partridges.

Whether or not there was any real co-ordinated thought given to the developments in the South, we may well never know. GONHS made several unsuccessful attempts at offering its services to assist in such a co-ordinated effort. We asked for all the needs for the area to be considered at once, and balanced with the need to protect wildlife and the landscape.

Failure to engage us at the early stages leads to subsequent complaints and generation of adverse publicity – which comes in for criticism from those who seem to believe that we are just out to block progress.

We will keep on trying to protect our natural history – which includes our landscape – and will be judged, not by those who look at short-term interests, but those who look back on this part of our history and are grateful for what we did achieve and wonder why nobody listened to all the rest.
Editorial

LETS TELL THEM

The political agreement reached in Cordoba now over a year ago between the Governments of Gibraltar, the United Kingdom and Spain included an understanding to progress on environmental matters. Public reference to developments on this front have been limited, and it would be easy for those of us whose main work is the environment to express frustration through criticism. But actually, it may well be our own fault.

How well versed are the politicians and officials on all three sides on the most pressing environmental needs of our region? How many facts and figures do they have in their active files which remind them constantly of the importance of and dangers to our regional biodiversity, that we need to progress on ship-

NATURAL HISTORY COURSE

March saw the start of the first Natural History course organised by GONHS after many years. Interest in the course ran high, and with the limited space available at The Cottage at the Alameda where the lectures were being given, numbers were limited to 25. A number of people had to be put on a waiting list for the next course once this number was reached.

The course covered many aspects of Natural History, including habitats, plants, birds, bats, invertebrates, marine life, the macaques, cliffs and caves and conservation. The format of the course consisted of a series of lectures and a few outings. The course was launched on Thursday 13th March, with the first lecture delivered by Botanical Section Co-ordinator Leslie Linares, on Habitats and Plants. The first outing was held on Saturday 29th March, and 19 of the students enjoyed a climb up Mediterranean Steps to get a practical experience of, and learn more about, invertebrates and plants.

Attendance at the lectures was excellent throughout. The average attendance was 21 (84%), whilst the average attendance for outings was less, 15 (60%). Certificates of attendance were handed out at a small reception held following the last lecture on conservation delivered by Dr John Cortes. Those following the course were also asked to provide us with some feedback by filling in a survey form, and the results from this have been very encouraging and positive, indicating that the course had been a great success. There are now plans to hold a second course in the autumn.

John Cortes
The east side of Gibraltar is due to change drastically in coming years. The major East Side Development, once known as ‘Sovereign Bay’ has received outline planning permission following acceptance by the Development & Planning Commission, of the Environmental Impact Assessment of the site. This was an extensive document that highlighted a number of environmental concerns, both short and long term.

Concerns included a reduction in quality of the bathing waters in some sections of beach, the need to analyse the material in the fill as toxicity could not be ascertained during the study, and impact of dredging on coastal processes.

In its own representations on the matter, the Catalan Bay community provided a great deal of evidence referring to the degradation of the marine habitat in the area. The EIA had, for example, dismissed the effect on the sandy seabed communities because it has already deteriorated due to conch raking. The Catalan Bay representations state that this is not an argument, as the habitat could recover with time if protected. Indeed some of the points raised regarding the deterioration of the marine habitat are alarming. The Eastside development will do nothing to improve this.

The construction will block much of this view, and this feeling of wilderness, to be replaced with an impacting development of six luxury villas. Thus six people will replace what is currently there and, judging by the trends elsewhere in Gibraltar, the owners will be absent for most of the year.

An environmental statement was prepared for the developer by a UK-based firm, Environmental Gain Ltd. The same firm also prepared a statement for the Government which requested this as an Appropriate Assessment which was required as the site is adjacent to a Community site.

GONHS considered that neither document was thorough enough nor that all environmental aspects were addressed. Outline planning permission was nevertheless given.

The site is partly covered with invasives, but on the other hand holds a wide range of plant species and is important for molluscs and reptiles, with Bedriaga’s Skink, a species of European importance being found there.

Representations have been made to the pertinent authorities to have the permission reversed, and Nature News will report on progress.

An on-line petition urging the Gibraltar Government to halt the project can be accessed on http://www.thepetitionsite.com/1/stop-both-worlds-villas.

This development cannot be considered in isolation. Together with the larger Eastside project, another project by ABCO to the south of Sandy Bay, and plans adjacent to the nearby Caleta Hotel, Gibraltar’s eastern coastline could suffer irreparable damage and the natural character of the area obliterated.

The visual impact of the development will be huge. Advocates of the scheme hail this as adding an attractive feature to the area. Most people fear the adverse effect on the natural look of Gibraltar’s north-eastern sea-cliff landscape, which will become distorted for ever.

At least, one would have thought, most of the coastline to the south of this development, would retain most of its natural character, retaining its historical, wildlife and landscape value. Not so. In reviving an old scheme which most had wanted to forget, ABCO, a Gibraltar-based company, applied for planning permission to build on the sand slopes above Sandy Bay.

This area is adjacent to a protected Site of Community Interest, listed by the European Union. It is a green site with an interesting natural community. Moreover, it allows a clear view from the main road of the impressive Great Sand Slopes and the cliffs above, providing one of the few views of almost completely natural landscape in Gibraltar.

The construction will block much of this area of the proposed villas.

In November 2006 members of the Cliffs and Caves Section of GONHS helped in planting out eight young Silene tomentosa on the cliffs above Mediterranean Steps. This was reported in Issue No. 13 of Nature News. This last spring, two of these plants were seen flowering for the first time. The plants looked healthy and well established on the cliff, and hopefully seeds from these plants will germinate elsewhere around the site.

Every year, a botanical survey is carried out of the restored sand slopes on the East Side. This year, during the survey carried out on 24th April, an amazing discovery was made: a Gibraltar campion, Silene tomentosa, growing on the sand slopes. The plant is a mature one, some four or five years old, and is in extremely good condition, as seen on the photograph. The last time that a plant of this species was seen growing in the wild was in 1994, 14 years ago!

What makes the find especially astonishing is the fact that it is growing on sand and in a completely exposed situation. In all the floras from the 19th century and later, this species is always described as growing on limestone cliffs and outcrops. In fact, all recent sightings of this very rare, endemic species have been precisely on limestone outcrops. The discovery of this plant in this habitat turns on its head all previous notions about the species.

Some 20 seeds were collected from this plant during a seed-collecting visit to the slopes in July.

GONHS Botanical Section Co-ordinator Leslie Linares has been congratulated for obtaining this year’s Senior Heritage Award from the Gibraltar Heritage Trust. This award is in recognition of his dedicated researching and recording of Gibraltar’s flora over the last 30 years. It is noteworthy that this award recognises that our natural heritage is an important and integral part of Gibraltar’s Heritage.
Making up much of Gibraltar’s southern horizon, and lying 25km away across the Strait, Jbel Moussa rises from the sea to a height of 851m. Although from the north it appears to be one mass with one summit, it actually consists of two main hills, running approximately north-east to south-west, separated by a col. The alignment of the hills means that this can only be appreciated when the mountain is viewed from the north-east or the south-west, and therefore this cannot be seen from the European side.

North African scholars claim that the mountain is named after the Prophet Moses, who features in Jewish, Christian and Muslim traditions. To the Romans it was Mons Abyla, with Gibraltar (Mons Calpe) one of the twin Pillars of Hercules, which marked the end of the world. An early English name was the much less romantic Apes’ Hill, nevertheless a factual title, as there are Barbary macaques there to the present.

A reference to the Barbary macaque Macaca sylvanus in the region of the Strait is contained in Abou Obeid el Bekri’s work of 1068 AD. This refers to there being “no place on earth with more monkeys than Merça Mouça”. Recent estimates suggest that there may be about 90 macaques in four groups ranging throughout the area, down to the sea cliffs. They have been observed by GONHS and Rabat University researchers during the GIBMANATUR Interreg project.

Jbel Moussa is made of limestone, the western mass being mainly Jurassic limestone similar to the Rock of Gibraltar. On the shore of the Strait it forms rocky platforms, including the offshore island of Laila (“Isla del Perejil”). This is the habitat of a population of extremely stunted Gibraltar Sea Lavenders Limonium emarginatum, subjected to both heavy grazing pressure by goats and extremely windy conditions. Wind is a feature at all levels on Moussa, at sea level both easterlies and westerlies rage past, while at the col, easterlies in particular are channeled through with tremendous force, and then tumble down the lee side, sculpting the lentisc scrub into a low, tangled thicket.

Most of the north of the mountain is either sheer cliff or very steep slopes, although a narrow path crosses it near the sea giving access to hamlets in the several picturesque sandy coves. In one such cove, near the village of Ben Yunes, lies the ruin of an old whaling factory. From near this point, the view of the summits of Moussa have given it the Spanish name of “la mujer muerta” (the dead woman). The cliffs, screes and rocky slopes provide a habitat to many plant species, all subject to grazing, which include species typically found in Gibraltar, such as Giant Tangier Fennel Ferula tingitana and Joint Pine Ephedra fragilis.

The upper reaches of the gentler south-west slope is very heavily grazed, only Lentisc growing to any height, with some plants, such as Bear’s Breech Acanthus mollis clinging on to the least accessible crevices. Lower down on this slope are another series of hamlets, each with their mosque. Around these inhabited areas there is more vegetation, and in some years a profusion of wild flowers can be seen in the spring, which includes the Moroccan endemic larkspur Delphinium staphisagria.

The eastern slopes of the mountain are quite bare on the upper reaches, but lower down, where the gradient is gentler, have developing scrub and woodland. Some of it is similar to the matorral on Gibraltar, and on one rocky outcrop there several specimens of Gibraltar Candytuft.
Iberis gibraltarica were found during a GIBMANATUR expedition. Lower down the soil is more acidic and shrubs and trees include Tree Heather Erica arborea and Strawberry Tree Arbutus unedo.

Nesting birds on Jbel Moussa include Sardinian Warbler Sylvia melanocephala in the scrub, Wren Troglodytes troglodytes in most of the habitats, and Blue Rock Thrush Monticola solitarius on the cliffs. Raptors nesting on Moussa include Peregrine Falco peregrinus and possibly Lanner Falco biarmicus and Bonelli’s Eagle Aquila fasciatus. Black Redstarts Phoenicurus ochruros are resident also, not just at the summit, but also, unlike what is the case north of the Strait, right down to the sea level. The most typical bird of Moussa however, also extending from the summit to the sea, is the outstandingly beautiful Moussier’s Redstart Phoenicurus moussieri. Importantly also, there is at least one colony, near the sea, of apparently pure wild Rock Doves Columba livia.

Jbel Moussa, as a large geographical feature in a very windy region, is both an obstacle and an aid to migrating soaring birds. During migration periods flocks of storks and raptors can regularly be seen soaring in the area, either before deciding to cross to the north in the spring, or in autumn, after they have just arrived from across the Strait.

Like the Rock of Gibraltar, although on a larger scale, Jbel Moussa has many different characters depending on the weather, ranging from stunningly clear days to days when it takes on a mantle of thick mist. In whichever condition, this protected area retains a charm, which, together with the stunning landscape and varied wildlife, makes the visitor want to keep returning.
A new ant species to Europe has been found in Gibraltar. The ant Technomyrmex vexatus, recorded by GONHS Invertebrates Section members Rhian Guillem and Keith Bensusan, is common in the maquis of the Upper Rock. This is the first Technomyrmex species to be added to the Iberian fauna. The species had previously been thought to be endemic to Morocco, only being recorded from Tangier and Ceuta. T. vexatus appears to have a very restricted distribution and could be a Strait endemic. The account is published in the prestigious journal 'Myrmecological News', which deals with ant taxonomy and ecology. The paper can be downloaded as a pdf from www.myrmecologicalnews.org. The article citation is: Guillem, R. & Bensusan, K. 2008. Technomyrmex vexatum (Santschi, 1919) from Gibraltar: a new ant species for Europe and genus for Iberia. Myrmecological News, 11: 21-23.

Gibraltar’s Barbary macaque population repeatedly attracts international attention, often for the wrong reasons. A statement in the Gibraltar Parliament about an intended cull was picked up and led to representations from individuals and organizations around the world, including the Born Free Foundation and the International Primate Protection League. GONHS issued a lengthy policy statement on the Macaques, the full text of which can be found on the Society’s website (www.gonhs.org), and was involved in the public debate. This included a live Gibraltar Television discussion programme, Viewpoint, which saw contributions from the Hon E M Britto MP, Minister for the Environment, the Hon Fabian Picardo MP, Opposition spokesman on the environment, Helen Thirlway from IPPL and John Cortes from GONHS.

The GONHS position throughout has been one of considering culling only as a last resort, and working tirelessly on the options, which include exportation of offending groups. The ultimate aim is a healthy, stable population without the need for culling.
Work on the refurbishment of Charles V Wall started at the beginning of the year and rapid progress made, with the official inauguration taking place on 3rd July. GONHS was involved with this project from the beginning, with Co-ordinator of the Botanical Section, Leslie Linares, attending a number of site meetings to advise on, and check the progress of, any work requiring the removal of vegetation from the wall’s surface. The work of refurbishment was carried out by Nuttall Ltd, and funded by the Bonita Trust.

A number of woody shrubs which were growing out of the wall had to be removed, but none of these were of any significance. The only exception was a large and old hawthorn, Crataegus monogyna subsp bretensis, which was growing from the west-facing surface of the wall’s second landing. Hawthorns are quite rare in the Upper Rock, and following our request, this tree has been left in place as it does not threaten the wall’s integrity or stability.

Cracks and holes in the wall have been filled in with a special cement mix. The surface of the cement has been roughened, again on our recommendation, in order to encourage new growth of mosses, liverworts and ferns. It was also quite satisfying to note that, on their own initiative, the contractors had decided to coat the cement surface with a thin layer of soil while the cement was still wet. The resulting effect is quite good both visually and environmentally, as the soil will contain nutrients that will encourage the re-establishment of those species of plants that have had to be removed during the works.

Following the recommendation of GONHS, many of the smaller plants growing on the wall have been left in place, and only those that had to be removed were destroyed. But it won’t take long for those bare parts of the wall to become re-populated once again as seeds from the plants left behind drop into cracks and hollows and germinate. Important species found on the wall are the Gibraltar thyme, Thymus wildei, and the hairy toadflax or cliff-hanger, Chaenorrhinum villosum. Both of these species grow well on the wall, but only on the shadier north-facing side. On the sunnier south-facing side the main species are the toothed lavender, Lavandula dentata, the wall helichrysum, Helichrysum boissieri, and the rock phagnalon, Phagnalon saxatile.

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A young tree of the species Phillyrea angustifolia has been recorded from the East Side sand slopes. At present the tree has the appearance of a shrub about 1 metre tall, but eventually it will grow into a small tree that can reach 2.5 m. This species is common in Spain, but has not been recorded for Gibraltar before, although a different species Phillyrea latifolia grows on the Upper Rock. The likelihood is that this tree has sprouted from a seed deposited with some bird dropping. There were plans to introduce this particular species to the sand slopes, but it seems that nature has beaten us to it.
Two types of woodland habitat predominate in the area of the northern shore of the Strait of Gibraltar. The most typical of the region is Cork Oak (Quercus suber) woodland. The large ‘Parque Natural Los Alcornocales’, which covers some 177,000 ha., is comprised mainly of this. However, pockets of pine woodland of varying size also occur. These are mainly composed of Maritime Pine (Pinus pinaster), examples of which can be found on the Sierra del Buejo, and Stone or Umbrella Pine (Pinus pinea). The Stone Pine is the characteristic, umbrella-shaped species that people in Gibraltar are most familiar with. One fine example of Stone Pine woodland in the area of the Strait can be found very close to Gibraltar. Most Gibraltarians are familiar with the oak woodland however is the Limodore (Limodorum arboreum). This lovely plant is a parasite of its hosts. Inflorescences of this species form small mats of bright yellow and red. The community of herbaceous plants at Pinar del Rey is also striking. Two species of Lupin occur. Perhaps the most notable due to its abundance in some areas is the Yellow Lupin (Lupinus luteus). Another attractive flower is the Tassel Hyacinth (Muscari comosum). These bulbous plants produce blue flowers that are evident during the Spring. Orchids are always popular with botanists and the Mediterranean region is rich in species. Of the three species of pink and red Tongue Orchid that occur around the Strait, the largest and most striking is the Heart-flowered Serapias (Serapias cordigera). This beautiful flower grows well in the sandy soils of the Pinar del Rey. The most prominent orchid in this woodland however is the Limodore (Limodorum arboreum). This lovely plant is a parasite (Saprophyte) of pines that lacks green leaves. In some years, these violet flowers can be abundant and noticeable during the flowering period in mid-Spring, usually growing close to the bases of pine trees.

The assemblage of woodland birds inhabiting Pinar del Rey is similar to that of Cork Oak woodlands in the hinterland. Attractive species that can be found at the site include the Great-spotted Woodpecker (Dendrocopos major) and Short-toed Treecreeper (Certhia brachydactyla), as well as Woodchat Shrikes (Lanius senator) and Crested Tits (Parus cristatus), show a preference for pinewoods throughout their range and are particularly common at this site, perhaps more so than other Tit species. They are certainly more abundant here than at any other site around the Strait. Due to the site’s sandy soils and profusion of insects, the Pinar del Rey provides an ideal habitat for Bee-eaters (Merops apiaster) to breed. These very colourful and audibly birds are very much a feature of these pinewoods during the Spring and early Summer. A bird you are less likely to see due to its cryptic plumage and nocturnal habits is the Red-necked Nightjar (Caprimulgus ruficollis), which hawks for insects mainly during the late evening and early morning. Nightingales (Luscinia megarhynchos) during the Spring and Summer Months. Less common but also present all year round are the Cirl Bunting (Emberiza cirla) and Hawfinch (Coccothraustes coccothraustes). Crested Tits (Parus cristatus), show a preference for pinewoods throughout their range and are particularly common at this site, perhaps more so than other Tit species. They are certainly more abundant here than at any other site around the Strait. Due to the site’s sandy soils and profusion of insects, the Pinar del Rey provides an ideal habitat for Bee-eaters (Merops apiaster) to breed. These very colourful and audibly birds are very much a feature of these pinewoods during the Spring and early Summer. A bird you are less likely to see due to its cryptic plumage and nocturnal habits is the Red-necked Nightjar (Caprimulgus ruficollis), which hawks for insects mainly during the late evening and early morning.
The birds of prey of the Pinar del Rey are those typical of woodlands in our region. Booted and Short-toed Eagles (Aquila pennata & Circaetus gallicus) and Common Buzzards (Buteo buteo) are present during the breeding period. Griffon Vultures (Gyps fulvus) can be seen overhead all year round.

As with any of the woodlands in our region, the Pinar del Rey is inhabited by some species of large mammal including European Badgers (Meles meles), whose sets can be found on sandy banks along gullies. Reptiles abound too. The Spanish Psammomadromus (Psammomadromus hispanicus), which does not occur in Gibraltar, is found here. So too is the Spiny-footed Lizard (Acanthodactylus erythrurus), a species that is a specialist of sandy soil. The spines on the toes of this species are not too large, but those on other species of Acanthodactylus are as an adaptation to walking on loose desert sands. The burrows of the Ocellated Lizard (Timon lepidus) are also a common feature in the Pinar del Rey’s sandy soils. This is the largest species of lizard in Europe, adults reaching a length of 60cm.

The invertebrate fauna of the Pinar del Rey is extremely rich. Cistus species provide a habitat for a wide variety of insects. The reddish, very spiny leaf beetle Dicladispa testacea can be found breeding on plants belonging to this genus. Beetles typical of sandy soil abound, such as the darkling beetle Pimelia maura. The large ground beetle Scarites cyclops hunts darkling beetles, whose thick cuticle it breaks through with its very large and sharp jaws. Cattle are kept in fenced areas outside of picnic sites. Their dung attracts a diverse fauna of dung beetles. Large species belonging to the genus Scarabaeus (Scarab Beetles) are common in flight on warm days and are frequently found on the ground, sometimes rolling balls of dung for their larvae to feed on. The butterfly fauna of the Pinar del Rey is very rich. Indeed, a subspecies of the Portuguese Dappled White (Euchloe tagis davidii) is found nowhere else. This subspecies was described by Antonio Verdugo and José Luís Torres, both of whom are friends and collaborators of members of the GONHS Invertebrate Section.

The Pinar del Rey has been the subject of considerable controversy lately, since plans are afoot to build a new motorway that will, if present plans are executed, run through the pinewood. This would constitute an ecological disaster. The Pinar del Rey is the only mature Stone Pine woodland for many kilometres. In addition, the flora and fauna of the site are diverse and important. Furthermore, this woodland has been enjoyed as a recreational area for people from the region for generations. Every effort should be made to ensure that the motorway is diverted and that the Pinar del Rey remains in its current, healthy state for many generations to come.

During the past months, the GONHS have turned their attention to removing introduced species on the East Side sand slopes. There are a number of species that have become established on the sand slopes. Some are more invasive than others. The most problematic in the area is the Red-eye wattle or Rooikrans, Acacia cyclops. This is a dense, much-branched, evergreen, shrub or small tree from 1 to 5 m tall, which forms thickets, resulting in the exclusion of other native species. This is very noticeable on the slopes above the Caleta Hotel. A number of these trees have appeared on the re-vegetated slopes where the water catchment sheets were removed, and these trees are among those that have been targeted by our hard-working team.

Following from the excellent work removing the stand of prickly pear cactus at Governor’s Lookout, the Upper Rock Team currently working under GONHS turned their attention to removing introduced species on the East Side sand slopes. There are a number of species that have become established on the sand slopes. Some are more invasive than others. The most problematic in the area is the Red-eye wattle or Rooikrans, Acacia cyclops. This is a dense, much-branched, evergreen, shrub or small tree from 1 to 5 m tall, which forms thickets, resulting in the exclusion of other native species. This is very noticeable on the slopes above the Caleta Hotel. A number of these trees have appeared on the re-vegetated slopes where the water catchment sheets were removed, and these trees are among those that have been targeted by our hard-working team.

Other problematic species in the area that are being removed, are the blue-leaved wattle, Acacia saligna, the Cape wattle or Stink-bean, Paraserianthes lophantha, the shrub tabacco, Nicotiana glauca, and the Canary palm, Phoenix canariensis. Chopping down the trees is not enough to kill them and some will sprout again in due course. In an attempt to prevent this happening the stumps were treated with a specific herbicide that was hoped would lead to the destruction of the roots. However, just a few months after the operation, and despite the herbicide, some of the stumps have started to sprout as seen in the photograph. So, it’s back to the drawing board! Work on tackling these trees has not been easy as the sandy, sloping terrain is difficult to work on, and on a sunny day the heat can be unbearable, so we have to be grateful to the Team for their hard work. GONHS would also like to thank Aquagib for allowing access to the area through the Waterworks tunnel.
The town of Tarifa comprises the most southerly point of mainland Europe. Furthermore, at a distance of just 14km, the area around Tarifa is closer to Africa than any other part of the European continent. This places the area around Tarifa at a strategic point for wildlife viewing, both terrestrial and marine. Whale-watching takes place off Tarifa. Long-finned Pilot Whales (Globicephala melas), Killer Whales (Orcinus Orca) and Sperm Whales (Physeter macrocephalus) are seen regularly, as are three species of dolphin. Tarifa lies close to the meeting point of the Mediterranean Sea and the Atlantic Ocean and it is unsurprising that the rich sea life that inhabits the rocky shores around this town contain elements of Atlantic and Mediterranean marine ecosystems.

To naturalists, Tarifa is best known as the site where migrating soaring birds – raptors and storks – converge during migrations, especially before their crossing to Africa in the summer and autumn. More birds cross at the Strait of Gibraltar than at any other point in Europe, including the Bosphorus Strait. Of these, most fly past Tarifa where the crossing is narrowest. As a result, many thousands of birds of prey and storks accumulate at this site twice a year. Particularly abundant are White Storks (Ciconia ciconia), Honey Buzzards (Pernis apivorus) and Black Kites (Milvus migrans), although a number of other species are also numerous. These birds often sit on the fields just north of Tarifa, known as the Santuario de la Luz, during spells of bad weather or strong winds when they are forced to postpone their crossing of the Strait. During such times, many hundreds or even thousands of birds may be grounded, doffing the fields as they rest and await better conditions.

The beach of Los Lances, extending towards the northwest from Tarifa, receives protection as a nature reserve and provides stopover habitat for other birds. Waders, Grey Herons, Little Egrets, Great Cormorant and gulls and terns frequently sit on the beach, particularly around the estuaries of the Jara and Vega rivers and the tidal lagoon of the former, during migration periods and also during the winter. Flocks of Audouin’s Gulls (Larus audouini) are regular on the beach during most months of the year. Flocks of terns during migration periods often include the one or two Caspian Terns (Hydroprogne caspia) or Lesser-crested Terns (Sterna hirundo) among other species. Rare migrant waders include records of Eurasian Dotterel (Charadrius morinellus) during most years, especially in the late summer.

The dunes and sandy fields bordering the beach hold small numbers of breeding Kentish Plovers (Charadrius alexandrinus) and Short-toed Larks (Calandrella brachydactyla). The dunes hold typical vegetation that includes Marram Grass (Ammophila arenaria), Sea Holly (Eryngium maritimum), which looks like a thistle but is actually an umbellifer), Sea Stock (Malcolmia littorea) and Sea Spurge (Euphorbia paralias) among other plants of sandy habitats. Behind the dunes and to the north of the Rio Jara is a thin strip of Stone Pine (Pinus pinea) woodland. This wood is very young and is not rich in vegetation. The understorey, where present, consists mainly of White Broom (Retama monosperma), Thorny Broom (Calicotome villosa), Aromatic Inula (Dittrichia viscosa) and Spiny Buckthorn (Rhamnus lycioides ssp. oleoides). However, a few interesting plants can be observed within this wood. Four species of orchid are fairly common: The Bee Orchid (Ophrys apifera), Two-leaved Gentian (Genaria diphylla), Tongue Orchid (Serapias parviflora) and Autumn Lady’s Tresses (Spiranthes spiralis). The first three species flower during the spring, whilst the last flowers during the autumn after the first rains. A large ground beetle, Scarites cyclops, can be found crawling on the sandy soil, where it searches for its prey of darkling beetles (family Tenebrionidae).

Behind Los Lances, across the N-340 road, lies the Santuario de la Luz. The open habitat at this site goes brown during the summer when it is dry, but comes alive during the spring with a flora that is diverse in species and colour. Some of the fields become periodically covered in the flowers of colourful herbaceous plants such as Honeywort (Cerinthe major), Mallow-leaved Bindweed (Convolvulus althaeoides), Spanish Mallow (Malva hispanica) and Purple Viper’s Bugloss (Echium plantagineum). The large, blue thistles Carduus cardunculus and C. humilis are characteristic of this open habitat, as is the yellow-flowered Spanish Oyster Plant (Scolymus hispanicus). The basal leaves of this last species are stripped of their spines and sold in local markets as ‘Tagarnina’, for stewing or making omelettes. A very attractive plant that flowers during the autumn is the Mandrake (Mandraca autumnalis). The large, blue flowers of this species grow close to the ground. Although myths that Mandrake roots that are dug up scream and cause the death of anyone who hears are untrue, these should not be removed nevertheless: fields with Mandrake are recognised as a habitat of European importance under the EC Habitats Directive.

On a windless day during the spring, the Santuario de la Luz comes alive with the songs and calls of nesting birds. The breeding avifauna provides a taste of the birds of open plains for which much of central Spain is famous. Little Bustards (Tetrax tetrax) can sometimes be seen; a male regularly displayed in the area until at least two or three years ago. This bird shared a field with a pair of Montagu’s Harriers (Circus pygargus) and Common Quails (Coturnix coturnix). Zitting Cisticolas (Cisticola juncidis), Corn Buntings (Emberiza Serapias parviflora)
and nesting birds makes the site ideal for the large invertebrates almost endemic to the area of the Strait, can be seen flying and hovering over these fields, which are part of the foraging grounds of the colony that breeds in the old walls at Tarifa.

The Santuario is not just important for migrating and nesting birds. The area is rich in invertebrates. It has a very diverse and interesting fauna of ground beetles (family Carabidae) and is one of the sites where Anochetus ghilianii, an ant species that is endemic to the area, can also be seen flying and hovering over these fields, which are part of the foraging grounds of the colony that breeds in the old walls at Tarifa.

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A wonderful member of the family Proteaceae, *Banksia ericifolia*, flowered for the first time at the Gibraltar Botanic Gardens during the spring of 2007. The plant had been grown from seed by Botanic Gardens horticulturalist Andrew Abrines, having been sown eleven years prior to its first flowering.

The seeds were originally donated to the Gardens by Ana Greeno, who collected them at the Melbourne Botanic Gardens during the spring of 2007. The plant had been grown from seed by Botanic Gardens horticulturalist Andrew Abrines, having been sown eleven years prior to its first flowering.

The genus *Banksia* was named after Sir Joseph Banks, the famed 18th Century naturalist and botanist who joined Captain Cook on his first voyage to the Antipodes. There are some sixty species within this genus, native to all parts of Australia. *Banksia dentata* is also found in New Guinea.

The influence of Banks on natural history and horticulture is far reaching and over eighty species have been named after him. One of these is a leaf beetle (family Chrysomelidae) that is native to Europe and found commonly in Gibraltar. *Chrysolina banksii* feeds on a variety of plants but in Gibraltar it is most commonly recorded on Dock (*Rumex* spp.).

Identifying and classifying these species is not an easy task as this requires microscopic analysis of several characteristics, and the use of appropriate identification keys. Although there are some good books to help with this task, these mainly concentrate on the bryophytes of the British Isles. Searching the internet is sometimes fruitful, but not always.

Work continues on the search, identification and classification of the bryophytes found on the Rock. Botanical Section Co-ordinator Leslie Linares has been hard at work collecting specimens and making photographic records of as many species as he can find. To date he has found 16 different species of mosses and 11 different species of liverworts.

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**BANKSIA IN FLOWER**

is a tiny moss which forms small clumps on the bark of trees and old walls. *Homalothecium sericeum* is a moss which forms extensive mats on old walls and can be identified by its silky texture. The liverwort *Riccia lamellosa* forms on bare earth, usually on footpaths and is easily distinguished by the densely packed, blue-green thalli, usually branching into two. *Lunularia cruciata* is one of the most common liverworts, easily identified by the crescent-shaped ridge of tissue protecting the gemmae. Perhaps the most common liverwort on the Rock is *Targonia hypophylla* which forms extensive cover on old walls around town. The ribbon-shaped, dark green thallii have a dark purple involucre on the underside of the thallus near the apex. *Plagiochasma rupestre* is a rare liverwort, found on bare soil on rocky outcrops in the Upper Rock. It can be distinguished by its blue-green thallii, with purplish, lobed margins. *Fossombronia caespitiformis* is a leafy liverwort that can form extensive mats. It is easy to distinguish because its tiny leaves form dense rosettes, making them look like miniature lettuces.

**IDENTIFICATION OF MOSSES AND LIVERWORTS**

**Orthotrichum diaphanum** is a tiny moss which forms small clumps on the bark of trees and old walls. *Homalothecium sericeum* is a moss which forms extensive mats on old walls and can be identified by its silky texture. The liverwort *Riccia lamellosa* forms on bare earth, usually on footpaths and is easily distinguished by the densely packed, blue-green thalli, usually branching into two. *Lunularia cruciata* is one of the most common liverworts, easily identified by the crescent-shaped ridge of tissue protecting the gemmae. Perhaps the most common liverwort on the Rock is *Targonia hypophylla* which forms extensive cover on old walls around town. The ribbon-shaped, dark green thallii have a dark purple involucre on the underside of the thallus near the apex. *Plagiochasma rupestre* is a rare liverwort, found on bare soil on rocky outcrops in the Upper Rock. It can be distinguished by its blue-green thallii, with purplish, lobed margins. *Fossombronia caespitiformis* is a leafy liverwort that can form extensive mats. It is easy to distinguish because its tiny leaves form dense rosettes, making them look like miniature lettuces.
THE BIRDING SCENE

The end of last summer saw the return of small numbers of Zitting Cisticolas to Gibraltar; a species that had become established on Windmill Hill and on the Aerial Farm at North Front but had all succumbed to the cold record temperatures of the winter of 2005. Populations in Andalucía also suffered a marked decline and it has taken several years for the species to recover. This spring three Zitting Cisticolas have been seen and heard on the east side Sand Slopes, so there is a possibility that the species may re-establish a breeding colony in this new area. The late summer also produced some interesting observations including a White-rumped Swift, third record; a Long-legged Buzzard, two Rock Thrushes which stayed feeding in the vicinity of Levant Battery, a Quail at North Front Cemetery and a spate of records of Olivaceous Warblers with two in the Botanic Gardens and several more in the Cemetery.

Owls were recorded on the Upper Rock at night in the late summer, with Tawny Owl heard calling and Scops Owls frequenting the perches along Middle Hill Road prospecting for lizards, moths and other prey items. They were usually accompanied in the area by Red-necked Nightjars sitting in the middle of the road, picked up in the car headlights, as their big eyes reflected the light at a good distance. A Long-eared Owl sitting in a eucalyptus tree on the night of the 20th Sept was only the fourth record for Gibraltar.

By the autumn, finch passage was surprisingly dominated by Siskin flocks moving south, with other finch species also in attendance. A single Ring Ouzel was observed on Windmill Hill in mid October together with a Woodlark, and a Woodcock was found dead in the South District in November. A Kittiwake was seen at Europa Point during this month after an absence of four years. The species is scarce in the Mediterranean, but on occasions wintering numbers have been larger, and the species is then often recorded in late January and February.

The end of last year also saw the return of wintering Thekla Larks in the area of Europa Point where at least a couple has been returning for the last few years.

The winter saw a remarkable increase in the number of Cormorants recorded along our shoreline, with frequent records of birds feeding inside the harbour off Europort, along the North Mole, off Europa Point and along the east side of the Rock. The increased activity of this species is in stark contrast with the decline in records of the Shag off Europa Point, with very few observations of this species, which has seen it changing its feeding grounds to the area off Eastern beach. The Shag was already encountering the increased shipping activity in the Bay of Gibraltar, and presumably abandoned its feeding grounds off the North Mole in favour of the more ubiquitous Cormorant; a species more tolerant of human activity.

GOING DEEPER UNDERGROUND

In the Rock of Gibraltar one can find many caves and tunnels. Of all these caves none is as complex and large as Ragged Staff Cave. Found at the far end of Ragged Staff tunnel, it is believed to go as high up the Rock as the apes den.

The caves and cliffs section of GONHS has this year re-started the exploration of the cave. The aim is not only to map the cave, but to explore every single crack that can be found in this marvel of the Rock. The exploration started in February this year with two main trips having been completed. The first was just a quick investigation to find out how long it would take to get to the main chamber. This also was to plan the amount of equipment needed to go deep into the Rock.

As part of this exploration, water samples were collected from the two lakes found in the cave and electronic devices that take periodic temperature and humidity readings were put in place.

The reason for several preliminary trips into the main chamber is due to a thirty metre squeeze which has to be passed. This squeeze (very narrow passage) is very tight and uncomfortable making it difficult to pass any equipment through it. This makes the whole approach into and out of the main chamber (known as Crystal Cave) very slow and exhausting.

The Caves and Cliffs members will be returning in the close future to carry on the exploration of the cave. They hope that this will result in finding new chambers and the discovery of any secrets which the Rock maybe hiding.
The southern shore of the Strait of Gibraltar is as diverse in habitats and wildlife as is the northern shore. The habitats that stretch southwards from Tangier, dominated by plains and wetlands, are rich in birdlife particularly. The first notable site along this stretch is the large and cosmopolitan city of Tangier itself, where House Buntings (Emberiza striata saharae) have recently become established. Will they be crossing into southern Spain next?

An area of typical Mediterranean scrub dominated by fruit-bearing shrubs (particularly Lentisc, Pistacia lentiscus) and Cistus species existed until recently immediately south of Tangier along the Atlantic coast. This scrub was an important site for migrating passerines, sometimes holding large concentrations of species such as Song Thrush (Turdus philomelos) and Blackcap (Sylvia atricapilla). Such sites are undoubtedly important to migrants making their way along this coast. This scrub also held a population of Black-crowned Tchagra (Tchagra senegala cucullata), a largely sub-Saharan species of Bush Shrike with a subspecies that is endemic to northwest Africa. Unfortunately, the entire stretch of scrub was cleared very recently, no doubt in order to develop the area for tourists as is occurring at many sites along the Atlantic and Mediterranean coasts of Morocco. Such development is being carried out insensitively and one can only guess what repercussions such widespread habitat loss might have, not only to Morocco’s avifauna but also to that of countries whose migrant birds winter in or migrate through Morocco.

Although the scrub has been lost, a patch of Cork Oak (Quercus suber) woodland still remains immediately east of the beach. Most woodland sites in northern Morocco are in a very bad state, due largely to overgrazing of goats and sheep, the result of which is a depleted understory. However, this area is in a better state than most of its counterparts. The understorey is well-developed with the typical Heaths (Erica species), Rockroses (Cistus species) and Lentisc that dominate such habitat. Some of the typical woodland species of Morocco can be found here, such as the African Blue Tit (Cyanistes tenuirostris) and the African Chaffinch (Fringilla coelebs africana). Although currently considered a subspecies of the European Chaffinch, it would come as no surprise if this were eventually considered a good species due to its distinctive plumage and song.

The extensive Plains that roll towards the south from Tangier hold an interesting assemblage of bird species. Breeding birds include the last Great Bustards (Otis tarda) of Africa. The population of this, the heaviest flying bird, is critically small and unless some very drastic measures are taken, it will in little time become extinct there as it did in the Plains of La Janda on the Spanish side of the Strait area a few years back. As with open habitats in southern Spain, Spanish Sparrow (Passer hispaniolensis), Calandra (Melanocorypha calandra) and Short-toed larks (Calandrella brachydactyla) all breed. Common Cranes (Grus grus) can be fairly numerous here during the winter and migration periods, with several hundred birds occurring. These plains also include some large expanses that flood seasonally. During the winter, these flooded areas hold some of Morocco’s only wintering Greylag Geese (Anser anser) as well as thousands of duck, of which the Pintail (Anas acuta) stands out.

The marshes around the estuary of the Oued (River) Tahadart, situated along this stretch, are extremely extensive. The area is dominated by salt marsh of glassworts (Salicornia, Sarcocornia and Arthrocnemum species) and includes extensive tidal mudflats. The salt flats of the Tahadart estuary are home to a small number of Marsh Owls (Asio caperensis fringitanus). This race of an otherwise sub-Saharan species is endemic to Morocco and is critically endangered. It has a very small range (northwestern Morocco) and the population is declining. An estimated 50-140 pairs are left. The marshes around the mouth of the Tahadart are an important stopover site for migrating waders and waterfowl and regularly hosted migrating Slender-billed Curlews (Numenius tenuirostris). This bird is now perilously close to extinction. Moroccan was its main wintering ground but there is only one record for the country since 1995. Birds wintering in the Tahadart estuary include European Spoonbill (Platalea leucorodia) and Greater Flamingos (Phoenicopterus roseus), as well as an assortment of waders that includes Greyl Plovers (Pluvialis squatarola), Eurasian Curlews (Numenius arquata) and Bar-tailed Godwits (Limosa lapponica). The fields along the road south from Asilah to Larache are probably the best area along these plains to see Black-winged Kites (Elanus caeruleus), which are never the less found throughout the whole of the area. The fields are very beautiful, small raptors can sometimes be seen veering alongside the road, searching for their prey which consists of small vertebrates, terrestrial animals such as rodents and lizards. A notable feature of the area between Asilah and Larache, and some areas to the north of Asilah, are the extensive plantations of Australian trees belonging to the genera Eucalyptus and Acacia. These can also be seen south of Larache, towards Rabat. Eucalyptus, used widely in the paper manufacturing industry, is extremely detrimental to indigenous floras. These trees release allelopathic chemicals into the soil which inhibit the growth of other species. The result is that Eucalyptus plantations are largely devoid of indigenous flora and fauna. It is interesting to highlight though that two species of Australian longhorn beetles which feed on these trees, Phoracantha semipunctata and P. recurva, have also become established in North Africa and southern Europe.

The town of Larache sits above the south bank of the estuary of the Oued Loukkos. Larache has strong Spanish influences due to its past. Less tourist than Asilah, it is an attractive and charming place with a lovely little Medina and a bustling life, particularly during evenings. Larache is home to many pairs of Little Swift (Apus affinis). This attractive, stocky bird with a squared tail and broad white rump is a mainly sub-Saharan species, but is locally common in scattered locations across...
North Africa and the Middle East. Recently, small numbers have established themselves in southern Spain. The ‘Plaza de Liberación’ is a particularly good place to see them as they wheel about and fly under the archways that support their nests. These are very characteristic, constructed as large, overhanging bundles of feathers and other material. The flocks wheeling around the square are best appreciated over coffee and ‘churros’ (fried dough that is popular as breakfast in southern Spain). The ‘Plaza de Liberación’ is now the only site in the world for this subspecies and there are perhaps ten pairs (left), Marbled Duck (Marmaronetta angustirostris) and Ferruginous Duck (Aythya nyroca), a small population of which breeds in an area dominated by Yellow Flag Iris (Iris pseudacorus). The Red-knobbed Coot (Fulica cristata), an extremely rare bird in southern Spain, is by far the most common of the two species of Coot in these marshes. Glossy Ibis (Plegadis falcinellus) are abundant, numbering more than a thousand during the winter.

The springtime is extremely rewarding too. Whiskered terns (Chlidonias hybridus) float lazily over pools of water, whilst Squacco Herons (Ardeola ralloides) lie in wait in thickets of rushes and on watersides. Purple Herons (Ardea purpurea) breed in the huge beds of bulrush and are constantly seen flying low over these or fishing in pools of water. As with other wetlands in northern Morocco, amphibians are very much a feature of these wetlands. The assemblage of species includes the large, attractive and seasonally noisy Moroccan Toad (Bufo mauritanicus).

Many habitats in northern Morocco are under immense pressure from humans. The maintenance of the habitats and populations of species mentioned in this article is of vital importance to the conservation of Morocco’s still exceptionally rich biodiversity. However, the health of populations of migratory birds in their breeding ranges is dependent on conservation measures being taken throughout their entire range. As such, Morocco is of crucial importance to Europe’s migratory birds.
CATS - WILDLIFE’S ENEMY NUMBER TWO (AFTER US)

The Global Perspective
Cats (Felis catus) have been introduced everywhere by humans. Wherever humans have settled, their feral cats have gone with them. Today, cats have become one of the world’s most popular pets with an estimated 500 million cats in the world. But how many of us actually realise the destruction that they cause to wildlife? Cats are often involved in discussions of exotic nuisance animals due to their ubiquity and our familiarity with them as companion animals. Such introductions have become so well established all over the world that the cat is a catastrophic invasive alien species on every continent except Antarctica. After habitat destruction, the introduction of invasive animals by humans is the secondary cause of species extinctions in the world, and the cat is one of the most ecologically damaging introduced animals worldwide.

Each year domestic and feral cats kill billions of small mammals, birds and reptiles. Britain has 8 million domestic cats and a further 1 million feral cats and it is estimated that 275 million mammals, birds, reptiles and amphibians are caught annually by these cats. As well as many common birds decreasing due to predation by cats, species which are also greatly threatened such as Dormice, Water Voles and Sand Lizards. There are indications that cats can push small mammal populations to unnaturally low levels, causing a knock-on effect to bird of prey populations. In addition, the United States has 70 million feral cats and in New Zealand, cats and other introduced predators have nearly exterminated native bird species. The most catastrophic effect of cats have been seen on islands, where the native fauna has evolved in isolation of predators and where birds nest on the ground. Cats accompanied colonists and sailors on their travels, with serious consequences for the native fauna wherever they went. Today in the Galapagos Islands, native rodents exist only on those islands where cats do not, and the endemic Marine Iguana is greatly endangered due to predation from these introduced animals. Cats have eliminated a number of species of island birds, and others such as the New Zealand Kiwi and Kakapo are on the brink of extinction. The most famous example of a species extinction caused by a single living species is that of the Stephen’s Island Wren in New Zealand, a flightless species which was nearly exterminated by a lighthouse keeper’s cat in 1895. There are now major cat populations on those islands where cats do not, and the cat is one of the most ecologically damaging introduced animals worldwide.

Gibraltar’s Cats
Gibraltar has an enormous feral cat population, with an estimated 2000 living on the Rock. That amounts to 300 feral cats per km2! In contrast the UK, with a big problem of its own, has 4 feral cats per km2. When you also take into consideration the number of domestic cats, Gibraltar may have some 800 cats per km2. This is possibly the highest concentration of cats in Europe and has huge implications for native wildlife. Gibraltar is a very important place for migrating birds and many are killed every year due to predation by cats. Within the Upper Rock, feral cats are a cause for serious concern. Current law for the Upper Rock Nature Reserve states that it is illegal to introduce any animal or plant which is not ordinarily resident in a wild state, and illegal to allow pets to roam around a nature reserve. However, this has been ignored so far. The feeding of cats on the Nature Reserve regularly takes place outside St Michael’s cave. This greatly encourages them to congregate in the area. The native Rabbit, Barbary Partridge and White-toothed Shrew are particularly vulnerable to cat predation, especially since these species seem to be becoming less common on the Rock. Chicks of the Barbary Partridge are especially easy quarry for cats. Birds ringed at Jervis’s Gate field station are also affected by cats roaming in the area. Fine mist nets are used to capture, ring and process birds, but on many occasions these birds have been taken directly from nets by cats. With such a reliable food source here, cats are attracted to the area. At times this has become a very serious problem for ringers, who have sometimes had to abandon their scientific operation temporarily due to this.

Feral cats can carry and spread diseases such as salmonella, rabies, and FIV (feline immunodeficiency virus), as well as spreading fleas and other parasites. These diseases can in turn be transmitted not only to domestic cats, but also mammals and birds, and in some cases even humans.

Solutions?
What can be done about the feral cat problem in Gibraltar? The option of culling is by far the most efficient way of controlling the population and instantly reduces the effect upon native wildlife. However, there has been much objection over this solution and as always with animals, humane options are to be preferred when these are shown to be effective. At the moment, the more indelicate method of neutering is being used. In June 2004, the Gibraltar Cat Welfare Society set up a neutering programme for stray cats in Gibraltar. Over 1200 cats have been neutered so far and are recognised by the, now, clipped left ear. Whilst most populations have had a zero growth rate, there are still problems with ferals around Alameda House and Catalan Bay. Hopefully, these cats are greatly encouraged by people feeding them, especially around the Alameda estates. As a result, these cats have devastated various plants within the Botanic Gardens as well as killing many birds and reptiles there.

Many would argue that sterilisation is the best method. However, it is costly, not 100% effective and whilst there are still feral cats around it does not solve the immediate problems posed to wildlife on the rock. It is important to recognise that the Cat Welfare Society receives no Government funding. They are helping to solve the problem of an excessive feral cat population, so far having done a good job under the circumstances. Unfortunately, there is still a long way to go.

Government should take firm steps to control Gibraltar’s feral cat problem, either by supporting the efforts of the Cat Welfare Society or by embarking on a control programme themselves. Feral cats within the Nature Reserve should be removed since these are the ones that pose the most imminent threat to wildlife. It is also time for existing legislation to be taken seriously and reinforced where necessary. One possibility would be to introduce cat licenses, as is the case for dog owners. Cat owners should be made aware of the problems caused by cats to wildlife, and should be encouraged to neuter their pets if these are not to be used for breeding purposes. This would go some way towards controlling the problem of domestic cats breeding with strays. Equally, people should realise that if they do not want their cats, there are people such as those in the Cat Welfare Society and the GSPCA who may be able to offer advice or even help. It is especially important that people refrain from feeding the stray cats. The recent controversy surrounding the Macaques has served to highlight the many problems that can result from the feeding and over-population of wild or feral cats. As with Macaques, stray cats that are fed by humans even develop problems with obesity. The problem of stray cats needs to be tackled effectively and soon, for the benefit of both wildlife and cats themselves.

Special thanks must go to Nanette Roberts of the Cat Welfare Society who very helpfully provided information on their activities on the Rock.

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